#### **FIRE PREVENTION WEEK**

October 9-15 is Fire Prevention Week, so you may see an emphasis on fire prevention this month. But really, fire prevention is a year-round job and we all share in the responsibility. Do your part to keep our workplace free of fire hazards.

#### **BEWARE THESE FIRE HAZARDS**

Here are important questions and answers about flammable and combustible liquids:

# Q. What is the difference between flammable and combustible liquids?

- A. Flammable liquids have a flash point of less than 100°F. Combustible liquids have a flash point above 100°F. A flash point is the minimum temperature at which a liquid forms a vapor above its surface in sufficient concentration that it can be ignited.
- Q. Why are flammable and combustible liquids more hazardous at high temperatures than at room temperature?
- A. The vapors burn, not the liquid itself. The rate at which a liquid produces flammable vapors depends on its vapor pressure. The vaporization rate increases as the temperature increases.

## Q. Why is it dangerous that vapors from nearly all flammable and combustible liquids are heavier than air?

A. If ventilation is inadequate, these vapors can settle and collect in low areas and can spread far from the liquid itself. If this vapor trail contacts an ignition source, the fire produced can flash back into the liquid, causing a conflagration.



"Is it just me, or does that sound like a huge waste of time?"

# MOC Safety and Environmental Management Safety VVorks

**Marine Operations Center** 

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# Fire in the Workplace

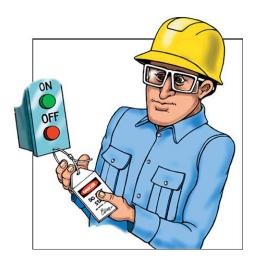
## Preventing fires is everybody's job

On an average day, over 200 fires occur in U.S. workplaces. Annually, those fires kill 200 workers, injure 5,000 more, and cost American businesses well over \$2 billion. As one former Secretary of Labor said, "Fires wreak havoc among workers and their families and destroy thousands of businesses each year, putting people out of work and severely impacting their livelihoods. The human and financial toll underscores the serious nature of workplace fires."

Unfortunately, there are dozens of ways for workplace fires to start—chemicals, electricity, flammable liquids, combustible materials, compressed gases, smoking, even poor housekeeping. We need to protect against all these potential fire hazards all the time to make sure we're not one of the 200 U.S. workplaces that go up in smoke today.

Here's what you can do to prevent workplace fires:

- **8** Store chemicals properly in tightly closed containers.
- **8 Read labels and MSDSs** for the fire hazards related to the chemicals you use.
- **&** Keep flammable and combustible materials away from ignition sources.
- & Keep incompatible chemicals away from each other.
- **8** Check containers regularly for damage or leaks.
- **8** Clean flammable liquid spills right away, and dispose of liquids and cleanup materials properly.
- **8** Make sure cords and plugs are in good condition before using electrical equipment.
- **8** Don't overload electrical circuits.
- **& Keep hot equipment away from combustible materials.**
- **8 Shut down electrical equipment that smokes** or sparks.
- **Obey smoking rules** and "No Smoking" signs.
- **Extinguish cigarettes and matches completely** in designated containers.
- **8** Handle compressed gas cylinders carefully and keep them away from heat.
- & Keep your work area free of trash, combustible scrap materials, and other debris.
- **8** Place oily rags in metal containers with lids.
- **&** Keep machines free of dust and grease.
- & Report fire hazards you can't correct yourself.



#### **ELECTRICAL SAFETY**

OSHA divides employees who work on or near electrical circuits into two categories: qualified and unqualified.

If you are a *qualified* worker, OSHA permits you to work on or near exposed energized electrical parts to do the work of an electrician. OSHA says you need to know:

- How to identify exposed live parts and their voltage
- How to de-energize electrical circuits and equipment before working on them
- How to lock out and tag electrical sources to prevent accidental reenergizing
- Proper use of precautionary techniques
- Which type of personal protective equipment (PPE) to use
- How to use insulating and shield materials to protect against electric shock
- How to use insulated tools
- How far away to stay from energized overhead power lines

If you are an **unqualified** worker with a job that exposes you to a risk of electric shock, you need to know:

- The risks of electrically energized equipment
- How to protect yourself and others when you work around electricity
- Which tasks can only be performed by qualified workers

Treat electricity with the respect and caution it deserves. Leave electrical jobs to qualified workers. Obey locks, tags, signs, barricades, and attendants warning you about electrical hazards.

# Machine Safety

## Take these steps to work safely

Machines that cut, drill, press, or form materials can also shred, crush, slash, and mangle human bodies. Use this list as a guide for any machine. Do you:

	Y ES	NU
以 Know how to turn equipment on and off safely?		
以 Inspect machines before use to make sure all parts are in place,		
including guards and other safety devices?		
Report—and don't use—machines with missing or disabled guards		
or protective devices?		
♦ Follow all machine operating instructions?		
♦ Wear proper eye protection?		
Avoid wearing gloves, jewelry, and loose clothing or long hair when		
operating machinery?		
Use a push stick, not your hands, to feed materials into machines?		
♦ Always give the job your full attention?		
♦ Make sure that scheduled maintenance is performed on machines you		
operate?		
♦ Make sure that machines are locked out and tagged before they are		
repaired or serviced?		
If you checked NO for any of these items, start doing them today.		

# Home Inspections

## Check for fire and fall hazards

October is National Home Inspection Month, a good time to check your home. When inspecting for **fire hazards**, think of two important factors:

- **1.** *Fire Prevention*. Include these items on your fire prevention checklist:
  - ➤ Safe storage and use of flammables
  - ➤ Electrical equipment in good operating condition
  - ➤ Matches, lighters, etc., out of the reach of children
  - ➤ Fireplace screens
- **2.** Fire Procedures. Include these items on your "what to do in a fire" list:
  - ➤ Smoke alarms on every floor of your home
  - Fire extinguishers in the kitchen and home workshop
  - A family home evacuation plan practiced regularly with the whole family

When inspecting for **fall hazards**, implement precautions such as:

- Nonskid surfaces and no-slip rugs and floor mats
- > Prompt cleanup of spills
- > Keeping "traffic lanes" free of clutter and electrical cords
- > Providing stairways with full-length handrails and plenty of light
- ➤ Warning family members to be careful on stairways
- Teaching everyone to use ladders—never chairs or boxes—to reach items



#### LEAD THE DRIVE FOR SAFETY

Here's how to promote safety on the road:

- If you drive on the job, obey our policy as well as state and federal regulations.
- Always buckle your safety belt in a moving vehicle. That goes for passengers as well as drivers.
- Inspect your vehicle regularly to make sure it's safe to drive.
- Obey the rules of the road as well as all traffic signs and signals.
- Drive at a safe speed for road and weather conditions.
- Practice defensive driving—watch out for the other guy and don't push your luck.
- Be an alert driver—always expect the unexpected and be prepared to act quickly and effectively to avoid collisions.
- Watch out for pedestrians and always give them the right of way.
- Never drink or take drugs and drive.
- Be a safe and courteous passenger, and let the driver concentrate on driving.

## **CLEAN AND SAFE**

Cleaning your work area may require tough industrial-strength cleaning compounds. These substances can cause skin or eye irritation.

Protect yourself by reading labels and MSDSs for cleaning products and following all instructions. Also remember:

**Don't mix cleaning compounds.** Some products are incompatible and could produce toxic vapors or other dangerous reactions when mixed.

# Be Security Minded

## Help fight crime in the workplace

October is National Crime Prevention Month. Here are a few security reminders:

- → Always follow security regulations and encourage co-workers to do so, too. Security rules are designed to protect you and the facility from crime, vandalism, and violence.
- → Protect your valuables. Lock them up or keep them with you.
- → Don't discuss company affairs off the job. You could unknowingly provide criminals with information that could help them breach company security.
- → **Protect computer passwords** and other security codes. Do not share this information with *any* unauthorized individuals.
- → Report strangers in restricted areas of the facility. If you feel safe doing so, ask them who they're looking for and offer to escort them to the person.
- → Secure doors and windows that are supposed to be locked to prevent unauthorized entry.
- → Report burned out lights indoors and outdoors.
- → Be careful coming and going from work. Be alert and cautious in parking areas, on public transportation, and on the street—especially after dark.
- → Carry a mobile phone if your job takes you on the road so that you can summon emergency assistance.

For additional information on NOAA security visit DOC Office of Security Website: http://www.osec.doc.gov/osy/

# Home Fire Safety

# Keep your family and home safe

Home fires threaten your home and your life. The causes of home fires include:

- **▼** Faulty electrical insulation
- **☒** Overloaded electrical circuits
- **☒** Careless smoking
- ☑ Improperly stored flammables such as gasoline and propane
- **☒** Cooking-related kitchen fires
- **☒** Children playing with matches and lighters

Here's how to keep your family safe:

- ☑ Keep wiring, appliances, and other electrical equipment in good condition.
- ☑ Don't overload electrical circuits.
- ☑ Don't smoke in bed or empty ashtrays before you go to bed.
- ☑ Store flammable materials according to instructions on the container.
- ☑ Have fire extinguishers and make sure everyone knows how to use them.
- ☑ Install smoke alarms on every floor and test them monthly.
- ☑ Keep matches and lighters away from young children.

#### FINAL NOTE:

The National Fire Protection Association (NFPA) reports that 70 percent of home fire deaths occur in homes without working smoke alarms. NFPA also says that only one in four Americans has devised *and practiced* a home evacuation plan.



#### IN THE DANGER ZONE

Every year nearly a million and a half work-related accidents require workers to take time off work to recuperate from injuries. The most dangerous hours are between 8 a.m. and noon when 30 percent of injuries occur. The afternoon hours account for only 23 percent of injuries.

#### **OSHA RULES AND YOU**

Since OSHA began operations over 30 years ago, much more is known about the causes and prevention of workplace accidents and illnesses. Workplace deaths have also significantly decreased.

Our facility is a safer and healthier place to work because of OSHA's guidelines and standards—and because of our own safety and health rules based on OSHA regulations. Here's how you can make our facility even safer:

- ⇒ Follow all OSHA and facility safety and health rules.
- ⇒ Use assigned personal protective clothing and equipment.
- ⇒ Participate in OSHA- and facility-required training.
- ⇒ Report hazardous conditions.
- ⇒ Report any job-related injury or illness promptly and get medical treatment.

### **VOTE WITH YOUR FEET**

Elect to avoid slips, trips, and falls by wearing sturdy, sensible shoes to work. Also be careful where you put your feet while you work.

# Chemical Charlie

## Don't be a careless Charlie around chemicals

Charlie is an easy-going guy. He never worries about anything, including the hazardous chemicals he uses on the job. When a co-worker asks Charlie where he can find an MSDS, Charlie says, "Huh?" When another co-worker reminds him that he needs safety goggles, Charlie says, "Yeah, right."

When his boss warns him not to eat around chemicals, Charlie says, "Sure thing, boss," and then eats his lunch in his favorite hiding place among the drums of solvent in the storage area. Wash his hands before eating? Are you kidding? After lunch, Charlie enjoys a smoke before heading to a safety meeting, where he'll have a nice little siesta.

What did Charlie do wrong? **EVERYTHING!** Don't be a careless Charlie.

- → Pay attention to safety training.
- → Read labels and MSDSs.
- → Wear assigned PPE.
- → Inspect chemical containers regularly for leaks.
- → Store and use chemicals safely.
- → Wash thoroughly after using chemicals.
- → Keep food, drinks, cigarettes, cosmetics, and street clothes out of chemical areas.
- → Report exposures immediately and get medical attention.

# Safety by the Numbers

# Test your knowledge of safety facts

Remembering key numbers can be important to your safety and health. Fill in the blanks below with the correct number and check your answers.

1.	When driving, always keep seconds behind the car in front, and
	seconds at night or in bad weather conditions.
2.	Never climb higher than the step from the top of an extension ladder.
3.	Stay at least feet away from power lines.
4.	If your blood pressure consistently measures/ or more, you have
	high blood pressure.
5.	Leave at least inches of clearance under fire sprinkler heads.
6.	The number in a blue diamond on a color-coded chemical label means
	the chemical presents a severe health hazard.
7.	Flammable liquids have a flash point of under degrees F.
8.	If a chemical splashes in your eye, flush your eye for at least minutes.
9.	Walking at a moderate pace can burn about calories an hour.
10.	If your blood alcohol concentration is percent or higher, you are
	considered legally intoxicated in most states.

#### **Answers:**

(1) 2; 4 (2) third (3) 10 (4) 140/90 (5) 18 (6) 4 (7) 100 (8) 15 (9) 250 (10) 0.08